REFERENCES

MacIntyre, Ferren. 2001. "Enso, Climate Variability, and the Rapanui, Part II. Oceanography and Rapa Nui". *Rapa Nui Journal* 15(2):83-94.

MacIntyre, Ferren. 2001. "Enso, Climate and the Rapanui, Part 1. The Basics". *Rapa Nui Journal* 15(1): 17-26.

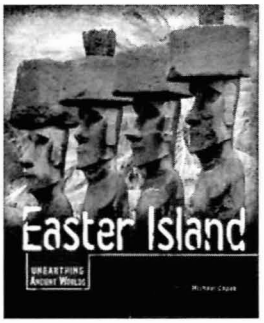
• • •

EASTER ISLAND. UNEARTHING ANCIENT WORLDS

Michael Capek

Twenty-First Century Books, 2009
Hard cover (978-0822575832)
$25.03 (Amazon.com)

Review by Georgia Lee



Capek's children's book is illustrated with nice color photographs, slick paper, a classy eye-catching design together with large size fonts, all making it attractive to kids. As a children's book, the text is basic, if a tad sketchy. Page 9, for example: "Experts think that ... these people are of Polynesian descent". *Duh*.

The Introduction covers Roggeveen, the Spanish, Cook, a bit about the slave raids, and *rongorongo*. Chapter 1, "The Land of Stone Giants", describes Thomson's visit to the island; the next chapter, "Sleeping Giants", discusses the statues and the *ahu*. Chapter 3 is about Routledge and the *Mana* Expedition. "Senor Kon-tiki" is the subject of Chapter 4. Chapter 5, "The Moai Makers", covers Ferdon, Skjølsvold, Mulloy, and then Van Tilburg's *moai* project. There is an epilogue, a timeline, glossary, etc.

I am not sure what age bracket this book is intended for (it's part of a series called "Unearthing Ancient Worlds") — perhaps up to 7th grade. It has enough material to interest most youngsters and seems basic enough for them to understand a good bit about the island's past history.

• • •

ASTRONOMY AND LANDSCAPE IN EASTER ISLAND: NEW HINTS AT THE LIGHT OF THE THE ETHNOGRAPHICAL SOURCES

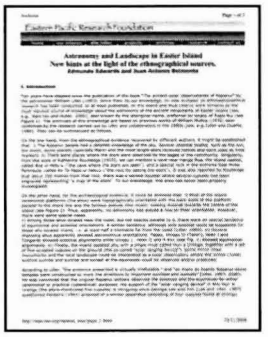
Edmundo Edwards & Juan Antonio Belmonte
*Archaeoastronomy in Archaeology and Ethnography: Proceedings of the European Society for Astronomy in Culture**

and

MEGALITHIC ASTRONOMY OF EASTER ISLAND: A RE-ASSESSMENT

Edmundo Edwards & Juan Antonio Belmonte
*Journal for the History of Astronomy: Archaeoastronomy***

Review by William Liller


Eastern Pacific Research Foundation

Astronomy and Landscape in Easter Island
New hints at the light of the ethnographical sources.
Edmundo Edwards and Juan Antonio Belmonte

In these two articles, very similar both in content and purpose, the authors argue the case that the 15 or 20 astronomically-aligned *ahu* on Rapa Nui were more likely constructed to indicate directions to the rising and setting of the Pleiades (known as "Matariki" in most parts of Polynesia) and to the Belt of Orion ("Tautoru"), rather than towards the solstitial and equinoctial sunrises and sunsets as this writer and others have suggested. In support of their argument, Edwards, who notes that he has spent much of his adult life carrying out investigations in the South Pacific, and Belmonte, a Spanish astrophysicist, point out that stars and star groups played an important part in the culture of the ancient Polynesians and in the important matters of navigation, but nowhere, they maintain, was there a "solar cult" such as existed in the early Americas and in many parts of ancient Europe and Asia.

The articles begin with a succinct summary of the astro-ethnography of the Rapanui, and the authors make note of the extensive knowledge the islanders had of the sky. Special attention is also given to both the several places where celestial bodies were observed and some supposed star maps. The authors then review briefly the archaeo-astronomical data with reference to the work of myself and others, including William Mulloy, who have measured the azimuthal orientations of most of the island's *ahu*. Mulloy and Edwin Ferdon have noted that a few man-made indentations — "cupules" — found at or near special vantage points or by significant *ahu* might also be aligned with rising and setting solstices and equinoxes. These have been dubbed "sunstones" and "solar ranging device".

The remainders of the two papers are devoted to a wide-ranging discussion including a valuable and important pair of tables summarizing the Rapanui names for stars and asterisms, and explaining the lunar/stellar calendar, as gleaned from local informants. Edwards is perhaps uniquely qualified to pull together the reports of his informants and combine them with the published tabulations of others like Routledge, Metraux, Englert, Johnson, and Mahelona.

Edwards and Belmonte emphasize that throughout Polynesia, the New Year was traditionally measured from the first appearance of the crescent moon after Matariki was first seen in the dawn sky in mid-June, its so-called "heliacal" rising. It just so happens that around a thousand years ago, when Matariki was low in the dawn sky at an altitude of around six degrees, it was almost exactly at the azimuth of the June solstice sun when it first appeared over the eastern horizon. Moreover, Orion's Belt — Tautoru — is and was very close to the same astronomical declination as the equinoctial sun. Therefore, the very real possibility of a dual interpretation exists, namely that an astronomically oriented platform or set of cupules could very well have been intended to mark the directions to both the Pleiades at its helical rising and to the rising solstitial sun since both would have occurred at the same azimuth. And the same can be said for Orion's Belt and the equinoctial sun.

Thus, this reviewer concedes that Edwards and Belmonte may be partially right. However, it should be remembered that Rapa Nui is well out of the tropic zone and that the inhabitants do experience seasons and therefore had to be concerned with the best time of year to plant crops such as taro, bananas, and other edibles. So maybe on this special little island, the sun was considered to be the more important celestial body. Furthermore, at the southerly latitude of Rapa Nui, Matariki never appears as high in the sky as it does in tropical zones. Being less conspicuous, therefore, it may not have had the same significance as it did elsewhere in Polynesia.

However, I certainly fully concur with the final conclusion of the authors, namely that the last word on Rapanui's archea-oastronomy has not yet been said.

My congratulations go out to the authors for finding the rock "for observing the stars" on Poike that was described by Routledge. My wife and I were twice unsuccessful in our searches (and once charged by a bull who objected to our presence). However, their suggestion that a group of cupules etched on a nearby rock was a star map that "likely represents Matariki" was not entirely convincing to this writer who was unable to see a resemblance to the well-known asterism.

As for their suggestion that the two *ahu* at Tepeu were intentionally aligned with the once-in-18-year occurrence of lunar "standstills", this reviewer is not entirely convinced because of the subtle nature of this event. Would the island's astronomical priests have been able to note and record the rarely occurring extreme declinations to the moon? If so, they probably would have been able to predict solar and lunar eclipses. As this reviewer has written, there was a remarkable series of five total and near-total solar eclipses during an eleven-year period late in the 8th century CE. That onslaught of what must have been frightening events could have provided the motivation to understand and predict future eclipses.

I have long admired my good friend Edmundo Edwards and his dedication to Rapa Nui and Polynesia, but I must make two criticisms — one major, one minor. Surely, *mi amigo*, you should have known better than to claim copyrights to the second paper's Figures 7 and 9 which are exact copies of Figures 4.107 and 6.16 of Georgia Lee's 1992 classic work, *The Rock Art of Easter Island*.

And the Rapanui word "nui" means "big", not "small" (Reference 4 in the first paper). But surely you knew that, too, Edmundo.

I am most grateful to Georgia Lee for bringing these two important articles to my attention and to Shawn McLaughlin who first brought these article to the attention of Dr. Lee and later made useful comments on an earlier draft of this review.

(Note: Most of the work and ideas of the reviewer have been summarized in his book *The Ancient Solar Observatories of Rapanui*, a publication of the Easter Island Foundation.)

* Eastern Pacific Research Foundation, Archives (Chapter 12), 2007

** 35:421-433 (2004)

• • •

EL ORGULLO DE SER RAPANUI - DOCUMENTAL
(The Pride of Being Rapanui - Documentary)

Denise Ducaud

2008; 60 min.
16,000 Chilean pesos / $25
presently available only through
the Museum Store on Easter Island

Review by Shawn McLaughlin

As most Rapanuiphiles know, it's notoriously difficult to find a decent documentary about Easter Island. Oh, there's no shortage of films, videos, and DVDs, although some of them can be hard to find. It's taken me years to accumulate the more than 50 documentaries in my collection and yet only a few of them stand out as being both illuminating *and* accurate without descending into lame drama about "mysteries" or provoking researchers into adolescent squabbling over their pet theories — or, worse, summoning the specter of "ancient asronauts". (Why do these productions feel it necessary to give equal time to theories that don't even deserve to be discussed, let along be given screen time? *Oh, well.*) Nor has the passage of time meant the productions necessarily get any better. One of the most interesting is a black-and-white film shot during the Franco-Belgian Expedition in 1935. The Cousteau Society's *Blind Prophets of Easter Island* has its 1970s charm (and, among other things, the near-fatal but rather dramatic sequence